

Jewell County

Estimated Economic Contribution of Agriculture, Food, and Food Processing Sectors 6/26/2019

Using the most recent IMPLAN data available (2017) adjusted for 2019, 10 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Jewell County economy.¹

These 10 sectors have a total direct output of approximately **\$158.7 million** and support **528 jobs** in Jewell County. Running the model for all 10 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Jewell County Economy					
Contribution Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵
Direct Effect	528.1	31.64%	\$59,383,534	48.53%	\$158,666,602
Indirect Effect	122.6	7.35%	\$7,616,140	6.22%	\$17,300,005
Induced Effect	72.1	4.32%	\$4,707,658	3.85%	\$9,253,326
Total Effect	722.8	43.31%	\$71,707,331	58.60%	\$185,219,934

As shown in the above table, agriculture, food, and food processing sectors support **723 jobs**, or **43.31%** of the entire workforce in the county.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 10 agriculture, food, and food processing sectors is approximately **\$71.7 million**, or **58.60% of the GRP**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

<https://implanhelp.zendesk.com/hc/en-us/articles/115002801513-Considerations-of-Contribution-Analysis>

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **232 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Jewell County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	231.6	\$41,128,419
Animal production, except cattle and poultry and eggs	92.8	\$14,919,153
Grain farming	92.1	\$48,947,655
Support activities for agriculture and forestry	41.1	\$3,623,920
Wholesale trade	40.4	\$6,838,843
All other crop farming	29.7	\$3,311,922
Oilseed farming	28.3	\$41,830,894
Truck transportation	18.5	\$3,000,649
Services to buildings	10.9	\$242,134
Monetary authorities and depository credit intermediation	8.9	\$1,779,803

The grain farming sector directly contributes approximately **\$48.9 million** to the Jewell County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Grain farming	92.1	\$48,947,655
Oilseed farming	28.3	\$41,830,894
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	231.6	\$41,128,419
Animal production, except cattle and poultry and eggs	92.8	\$14,919,153
Wholesale trade	40.4	\$6,838,843
Support activities for agriculture and forestry	41.1	\$3,623,920
All other crop farming	29.7	\$3,311,922
Dairy cattle and milk production	8.1	\$3,062,465
Truck transportation	18.5	\$3,000,649
Owner-occupied dwellings	0.0	\$2,643,063

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Jewell County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	28.3	\$41,830,894.47
Grain farming	92.1	\$48,947,654.72
All other crop farming	29.7	\$3,311,922.31
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	231.6	\$41,128,417.97
Dairy cattle and milk production	8.1	\$3,062,465.43
Poultry and egg production	1.3	\$1,107,345.22
Animal production, except cattle and poultry and eggs	92.8	\$14,919,152.26
Support activities for agriculture and forestry	41.1	\$3,623,919.73
Bread and bakery product, except frozen, manufacturing	1.4	\$165,933.97
Farm machinery and equipment manufacturing	1.7	\$568,895.04

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Jewell County, the retail sector was omitted.